

## **How to Derive Data Dictionary from Textual Analysis?**

Written Date: January 4, 2010

In <u>Visual Paradigm</u>, there is a <u>glossary grid</u> which act as a data dictionary for recording important terms that appear in project. In this tutorial, we will start from filling in a problem description with the <u>textual analysis tool</u>, and extract terms from the description. Finally, we will <u>generate a PDF</u> report to list the terms and show the problem description.

- 1. Download otv.txt. You can also find this file at the bottom of this tutorial.
- 2. Open the downloaded file and read it once. The content is as below. It describes the operations of company OTV (Online Television).

## The OTV (Online Television)

The OTV (Online Television) is a company which delivers both paid and free online broadcasting services to all TV fans. Members can watch both live and archived TV programs on OTV's website, anytime and anywhere.

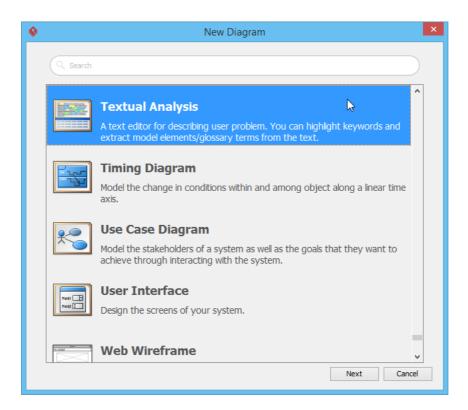
There are two kinds of memberships - general and premium. Visitors can register as general member, which is free of charge, to watch any archived TV programs, or as premium member, charges US \$30 per month, for watching both archived and live programs. A general member can upgrade himself to premium member anytime he want to. However, premium member is not allowed to change himself back to a general member, unless he remove his account permanently by mailing us the account removal form.

Besides watching TV programs, premium members can share their thoughts with each other, about the programs, by posting their opinion under the video panel as a discussion topic. Prizes will be given to the member who raised the most active discussion each month. Premium members will also receive monthly newsletters, which lists the recommended programs in the coming month.

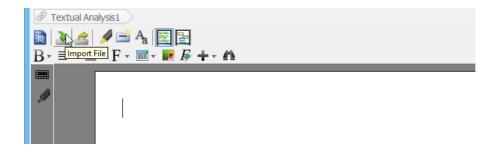
In order to maintain the system, administrators should have the rights to update the program schedule, update the program as well as to archive programs. Administrator should also help to monitor the delivery of newsletter to premium members.

- 3. Create a new project by selecting **Project > New** from the application toolbar. In the **New Project** window, enter *OTV* as project name and click **Create Blank Project**.
- 4. Select **Diagram > New** from the application toolbar.

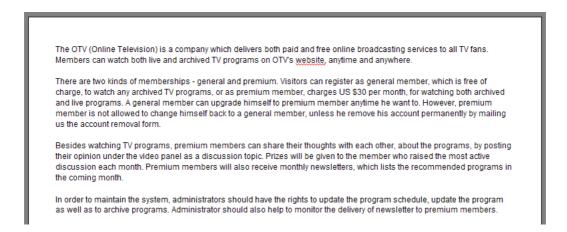
5. In the **New Diagram** window, select **Textual Analysis** and click **Next**. Leave the diagram name unchanged and click **OK** to create a Textual Analysis.



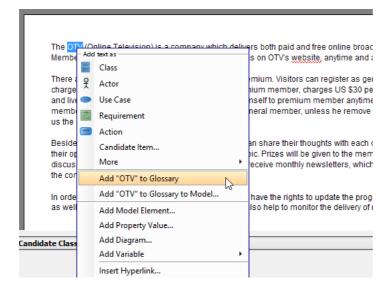
6. Click on the **Import File** button above the textual analysis editor.



Select the downloaded file otv.txt. You have to select **Text Documents** as file type in the file
chooser in order to see the file. By importing the file you should see the problem description
appear in the textual analysis editor.



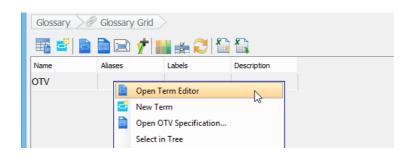
8. Start identifying the key terms from the problem description. Right-click on the first keyword *OTV* and select **Add "OTV" to Glossary** from the popup menu.



9. You should see a message appears on the status bar, telling you that the term OTV has been added into the glossary grid. Click on the link of glossary grid to go there. If you have missed that, do not worry. You can open the glossary grid by selecting Modeling > Glossary > Glossary Grid from the application toolbar.



10. Glossary grid is where glossary terms are listed. You can check the terms and their definitions in the grid. You can also create and manage terms via the related function buttons on the toolbar at the top of the glossary grid. Now, describe the term OTV. Right-click on the term and select Open Term Editor from the popup menu.



11. Enter the definition of term in the **Definition** field: A company which delivers both paid and free online broadcasting services..



12. We can use different texts (via aliases) to refer to the same term. This helps to avoid redundancy in creating multiple terms carrying the same meaning. Let's add an alias called "Online Television". Click Add on the right in the Aliases section (which is located at the top of the term editor).



13. Enter *Online Television* in the input window and confirm. *Online Television* is now an alias of the term *OTV*.



14. Add another alias Online TV.



15. Go back to the glossary grid by selecting **Modeling > Glossary > Glossary Grid** from the application toolbar. You can see the aliases and description (i.e. definition) as well.



16. Now, identify the following terms from textual analysis editor:

Term	<b>Diases</b> er
general member	<b>₫be</b> eral
	pærsobrers
	who
	own
	the
	free
	members
	and
	is
	allowed
	to
	watch
	free
	programs
archived TV programs	atrochived
	programs
	that
	was
	firstly
	broadcas
	for
	at
	least
	3
	months

premium member

**Thee**mium preersoloners who own the premium members and is allowed watch both free and paid programs

video panel video pane The panel for playing a program discussion topic Opinion posted by premium members, which talks about the program monthly newsletters newsletters An email to send to user every month, to give information on the company, as well as to list the recommend programs next month administrators admin The person who owns the right to manage the upload and removal of programs, and the memberships program schedule program timetable The timetable of TV programs update the program To update the list of programs on the programs page archive programs To mark a program as archived monitor the delivery of newsletter To make sure the newsletter are delivered. Failure delivery should be checked, and a re-send action should be taken.

Up to now, the glossary is completed:

Name	Aliases	Labels	Description
administrators	admin		The person who owns the right to manage the upload and r
archive programs			To mark a program as archived
archived TV programs	archived programs		The program that was firstly broadcast for at least 3 months
program schedule	program timetable		The timetable of TV programs
general member	general membership		The person who own the free membership, and is allowed to
update the program			To update the list of programs on the programs page
monthly newsletters	newsletters		An email to send to user every month, to give information o
monitor the delivery o			To make sure the newsletter are delivered. Failure delivery s
discussion topic			Opinion posted by premium members, which talks about th
premium member			The person who own the premium membership, and is allow
OTV	Online Television, Online TV		A company which delivers both paid and free online broadca
video panel	video pane		The panel for playing a program

Open

the textual analysis, we can see that those terms are highlighted.

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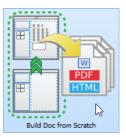
There are two kinds of memberships - general and premium. Visitors can register as <u>general member</u>, which is free of charge, to watch any <u>archived TV programs</u>, or as <u>premium member</u>, charges US \$30 per month, for watching both archived and live programs. A <u>general member</u> can upgrade himself to <u>premium member</u> anytime he want to. However, <u>premium member</u> is not allowed to change himself back to a <u>general member</u>, unless he remove his account permanently by mailing us the account removal form.

Besides watching TV programs, premium members can share their thoughts with each other, about the programs, by posting their opinion under the <u>video panel</u> as a <u>discussion topic</u>. Prizes will be given to the member who raised the most active discussion each month. Premium members will also receive <u>monthly newsletters</u>, which lists the recommended programs in the coming month.

In order to maintain the system, <u>administrators</u> should have the rights to <u>update the program</u> schedule, <u>update the program</u> as well as to <u>archive programs</u>. Administrator should also help to <u>monitor the delivery of newsletter</u> to premium members.

Let's

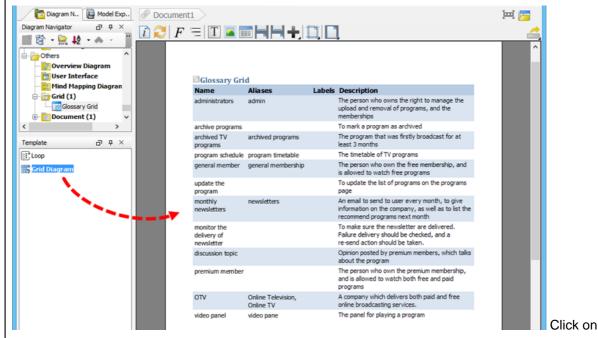
export the glossary grid as a document. Select **Tools > Doc. Composer...** from the application toolbar Click on **Build Doc from Scratch**.





You are presented the **Diagram Navigator**,

**Template Pane** and an empty document (editor). Let's create content in the document. Select the glossary grid in **Diagram Navigator**. Then, drag the **Grid Diagram** template out from the **Template Pane** and release it on the document to create content. You should see a table of glossary terms created in the document.



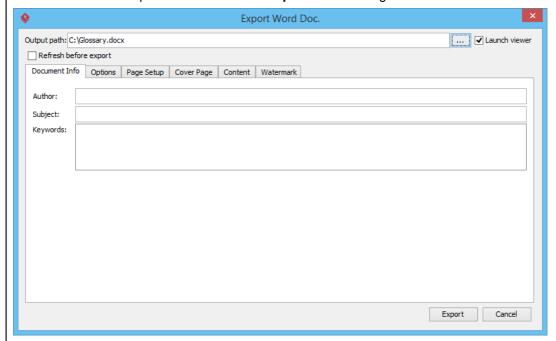
**Export > Word Document...** at the top right of <u>Doc. Composer</u>.

HTML Document...

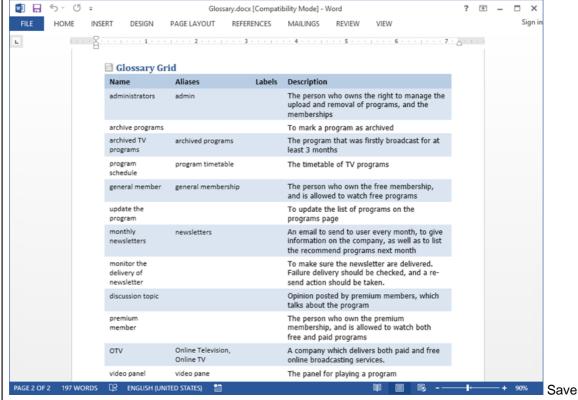
PDF Document...

Word Document...

In the **Export Word Doc.** window, provide the output path of the .docx file to be exported and then click **Export** at bottom right.



Open the Word file to take a look. You should see the glossary terms listed in the document.



the project. This is the end of the tutorial.

## Resources

1. <u>otv.txt</u>

## Related Links

• Full set of UML tools and UML diagrams



Visual Paradigm home page (https://www.visual-paradigm.com/)

Visual Paradigm tutorials

(https://www.visual-paradigm.com/tutorials/)